#### COBB COUNTY SUSTAINABLE PRACTICES POLICY

### Adopted by the Cobb County Board of Commissioners February 24, 2009

The Cobb County Board of Commissioners and the employees of Cobb County recognize the need to be effective and responsible stewards of the properties and assets entrusted to them by the citizens of Cobb County. Good stewardship includes incorporating sustainable environmental practices into its procurement, management and maintenance of the County's buildings, properties, and other assets. Accordingly, the Board of Commissioners establishes the Cobb County Sustainable Practices Policy to guide and implement practices and guidelines to conserve energy and water resources and promote environmental sustainability in how the County does business.

The goal of the <u>Cobb County Sustainable Practices Policy</u> is to obtain, enhance, and manage county assets for long-term energy conservation and environmental sustainability. Benefits from the program include improving energy efficiency and reducing ownership costs at county facilities, improving indoor environmental quality in county buildings, conserving materials and resources, planning and managing sustainable sites, improving stewardship of county lands, and safeguarding water and air quality.

#### I. Sustainable Buildings Standards

- A. New Construction over 5,000 square feet: All new construction 5,000 square feet or greater shall be designed and built to achieve LEED<sup>TM</sup> certification. County staff shall recommend to the Board of Commissioners which level of LEED certification is appropriate for the particular project based on sustainability and life cycle cost analysis. Where LEED certification is not fiscally justified per this Policy, the project design and construction shall include as many measures as possible based on LEED requirements.
- B. New Construction not LEED certified: All new buildings under 5,000 square feet, or all new buildings of any size that do not achieve LEED certification, shall be designed and constructed to earn the EnergyStar building rating. This standard specifies that a building is designed to operate in the top 25% among similar buildings for energy efficiency.
- C. Renovations of Existing Buildings: All building renovations shall follow LEED guidelines for design and construction wherever possible. For renovations affecting at least 50% of building's space, either the LEED certification or EnergyStar rating shall be pursued.
- D. Life cycle cost analysis for sustainable building design and construction: This Policy shall not require that new construction or renovations attain LEED certification or the EnergyStar rating where the financial payback to achieve such designations exceeds 10 years.
- E. Bicycle Friendly Facilities: All new facilities intended for community use shall have bicycle racks available for public and employee use. Community facilities shall be defined by the County Manager. The following are examples of community facilities to be considered: Libraries, Parks, Recreation Centers, Community Centers, Aquatic Centers, and Transit Park and Ride lots. Additionally, lockers and shower facilities for public and employee use should be considered for new facilities where appropriate.

Bike racks shall not be required where, in the opinion of the County Manager, doing so would jeopardize public safety.

F. Operations – Custodial Supplies: LEED approved custodial supplies and products shall be used whenever such supplies are proven effective and costs are competitive with non-compliant supplies.

## II. Water and Energy Conservation Standards for Buildings

- A. Water Conserving Fixtures and Equipment: Recognizing the need to conserve water, Cobb County recently performed audits of county facilities and retro-fitted restrooms with water efficient fixtures. Recognizing the need to continue to maximize conservation of this resource, the following performance specifications for new plumbing fixtures are adopted and shall be met or exceeded for fixtures and equipment in new construction and applicable renovations.
  - 1. Urinals shall be ultra-low flow, rated at <=0.5 gpf maximum. Wherever possible, waterless urinals shall be selected.
  - 2. Toilets shall be rated at <= 1.28 gpf maximum.
  - 3. Sink faucet assemblies shall be rated at <= 1.5 gpm maximum unless a higher flow rate is dictated by sink use (example: kitchen prep sink).
  - 4. Showerheads shall be rated at <= 1.5 gpm maximum.
  - 5. Fixtures and equipment labeled WaterSense® shall be the standard whenever possible. Future changes approved for WaterSense products that exceed the performance specifications above shall supersede these specifications.

The Purchasing Director shall amend the Purchasing Department's Environmental Purchasing Policy as necessary to incorporate the intent of this Policy and to effect its implementation.

B. Energy Conserving Appliances and Office Equipment: EnergyStar is a labeling program derived from a partnership between the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). All products displaying the EnergyStar label meet Federal Energy Management Program (FEMP) standards. Typically, this means that labeled products are in the top 25 percent of all similar products when ranked by energy efficiency, and use 25 to 50 percent less energy than their traditional counterparts.

Accordingly, products purchased by the County shall be EnergyStar labeled whenever practical. When EnergyStar labeled products are not available, energy efficient products shall be purchased that are in the upper 25% of energy efficiency as designated by the Federal Energy Management Program. This Policy shall not require EnergyStar labeled products where a life cycle cost analysis does not justify the purchase.

The Purchasing Director shall amend the Purchasing Department's Environmental Purchasing Policy as necessary to incorporate the intent of this Policy and to effect its implementation.

C. Conserving Energy – Lighting and Office Equipment: Building lighting and office equipment can exceed 50% of total energy use in a building. Recognizing that all county employees have responsibility for conserving energy in their own work areas, the following policy for energy conservation in the workplace shall be implemented to reduce non-essential energy use.

All county employees and departments shall ensure all building lighting and office equipment is turned off at all times when it is not required for county business or to ensure safety or essential operations. This specifically includes turning off non-essential lighting and office equipment during all unoccupied periods, including nights, weekends and holidays.

Those departments occupying county buildings shall be responsible for implementing this policy in their spaces and those they manage. Departments with responsibility for equipment or lighting in spaces occupied by other county staff (e.g. personal computers) shall promulgate rules for reducing energy use consistent with the intent of this policy whenever possible, subject to approval by the County Manager.

This policy shall be implemented in such a manner as to ensure there is no reduction of employee productivity or essential operations.

D. Conserving Energy - Heating and Air Conditioning: The following policy shall be implemented to reduce unnecessary energy for heating and cooling unoccupied buildings:

Whenever possible, temperature setting for building heating and air conditioning shall be re-set for energy conservation during periods when the building is unoccupied, including nights, weekends and holidays. Those departments occupying county buildings shall be responsible for establishing standards and implementing this policy in their spaces and those they manage, subject to approval by the County Manager and Agency or Department Head, and in consultation with the county department having maintenance responsibility for the building.

This policy shall be implemented to ensure there is no damage to building systems or contents, and no reduction in the comfort or productivity of building occupants or impact on essential operations.

# III. Landscaping and Grounds Maintenance Standards

A. Organic and Drought Tolerant Landscape Practices Policy: The County recognizes the importance of appropriate landscape practices for the protection of our water supply and our properties, and for the enjoyment of these resources by our citizens. Accordingly, the following policy is adopted for developing and managing county properties.

Organic and Drought Tolerant Landscape Practices Policy

- Select plants that are regionally adapted to the average rainfall of the area. Ensure plants are planted appropriate to site characteristics: shade, proximity to building, slope of site, and size of planting area. Group plants with similar water needs together.
- When landscaping a new facility preserve established vegetation growing on a site; it has an extensive root system and requires less irrigation water than newly planted trees and shrubs. Group plants with similar water needs together. High water use plants should comprise no more than 30% of the site.
- Concentrate seasonal color in small, high impact areas to reduce overall water requirements.
- Use practical turf areas and turfgrass that are best adapted to Cobb County's climate. Plant selection and adaptation are the most important factors in planning, planting, and maintaining a landscape for water conservation. A properly selected grass species or cultivar is more likely to thrive and need fewer inputs (e.g. water, fertilizer, pesticides, etc.). Selection and adaptation include the influence of environmental factors as well as the ability of the turfgrass plant to withstand periodic dormancy.
- Modify the root zone. Improvement in either the chemical or physical characteristics of the soil can reduce turfgrass irrigation needs by enhancing infiltration of rainfall, increasing soil moisture retention and promoting deeper rooting to reduce water leaching beyond the root zone. Soil needs to be amended with organic materials as needed to encourage water retention and deep root penetration. Unamended clay soils do not allow for deep root growth and requires excess water and maintenance. This practice involves understanding Cobb County's soils. The water and nutrient holding capacity of soils are different. Clay soils of the Piedmont need to be modified or managed in order to increase water retention on the site, minimize run off, limit the need for fertilizer and encourage deep root growth.
- Base the irrigation system design on the site landscape design, water use zones, and water use of the matured landscape. An irrigation plan and irrigation system diagram should be left with the County when the job is finalized and approved.
- Upon completion of the irrigation system installation, conduct a field performance audit to determine distribution uniformity and precipitation rates for each zone. This field audit should be conducted by a certified landscape auditor with a current (CLIA) certification from the Irrigation Association. System efficiency rating of 75% or greater is required. The system should be adjusted to reach at least 75% efficiency.
- Perform a thorough irrigation system inspection annually. Every 3 years a full irrigation system audit by a certified irrigation auditor with a current (CLIA) from

- the Irrigation Association. At least a 75% irrigation system efficiency rating is required. The system should be adjusted and repaired to reach the 75% efficiency rating if it fails to meet that efficiency.
- Prepare the planting bed properly by deep tilling to a depth of 8 to 12 inches. When planting individual plants, dig a wide planting hole to provide a favorable rooting environment. A large planting hole and deep tilling will allow roots to expand more easily and the plant will develop a strong root system, better able to sustain the plant during times of drought.
- Apply 3 to 5 inches of mulch on the soil surface after planting to conserve soil moisture and help maintain a uniform soil temperature, while preventing weeds that compete with plants for light, water, and nutrients. Fine-textured mulches prevent evaporative water loss better than coarse-textured mulches. For best water efficiency, mulch out to the drip line of plants (the outer edge of the leaves or branches) At least a 1-inch circumference bare area must be left around the base of the plant. Piling mulch against the trunk causes insect infestation and disease.
- Test soil to provide the best gauge for fertilization requirements of the landscape. Soil must be amended as indicated by the test to ensure plant health. A healthy landscape is more water efficient. Proper nutrition enables plants to better use available water and to conserve it during dry periods. Over-fertilization increases plant stress during times of drought.
- Scout the site and identify the problem weeds and insects.
- Develop an appropriate control program for the target, problem weeds and insects.
- Select and use LEED<sup>TM</sup> approved, environmentally friendly fertilizers and weed and insect control chemicals when their use is required and they are both cost effective and perform effectively.

#### **IV:** Green Vehicles Policies

A. No Idling Policy: Cobb County Fleet Management has previously required all drivers of county equipment to acknowledge they have read and will abide by the County's fueling policy, which provides that "no unattended vehicles be left idling at any time (except for emergency public safety vehicles)". Fleet Management also has a policy of minimizing idling of vehicles and equipment at their repair facilities.

To further reduce air pollution, energy use and cost, and vehicle and equipment wear and tear, the following Policy shall be implemented county wide.

It is the policy of Cobb County that drivers of fleet vehicles turn off vehicle engines (not idle) when a vehicle will be stopped for more than 30 seconds, except when in traffic. This policy applies, but is not limited, to the following situations:

- When loading or unloading goods or personnel
- When stopped for road construction
- When waiting at a drive-through window
- When stopped and waiting for any reason (except in traffic, such as when stopped at a traffic light).

## **Exemptions**

The policy of turning off vehicles when stopped does not apply for the period or periods during which idling is necessary under the following conditions:

- To provide for the safety of vehicle occupants, such as in cases of extreme hot or cold conditions (e.g. to run the air conditioner or heater under extreme heat or cold).
- To use lift equipment or other equipment necessary to accommodate individuals with one or more disabilities.
- When stopped in traffic, such as when waiting at a traffic light.
- When specific traffic, safety, or emergency situations arise.
- Except when stopped in traffic, if vehicles or equipment can be run from the battery alone, drivers should refrain from idling unless there is significant concern of draining the battery.

The Purchasing Director and Fleet Manager shall incorporate this Policy in their operations as necessary to effect its implementation and notify affected employees.

B. Green Vehicles Purchase Policy: Cobb County appreciates the benefits of operating the most functional, fuel efficient and least polluting fleet available to support county operations, while at the same time being fiscally prudent in vehicle purchase and operational costs. It is important to regularly evaluate the size and make-up of the fleet to ensure it is efficiently supporting county operations. It is recognized that transition to alternative fuels and hybrid or other "clean" vehicles are options for achieving theses goals.

Accordingly, it is the intent of this policy to establish a Green Fleet through a process of consideration of all aspects of fleet operations that will contribute to: (1) use of cleaner technology with reduced emissions; (2) reduced dependency on any particular energy source; (3) redundant types and sources of fuel; (4) lower or contained fuel costs; (5) improved fuel efficiency; and, (6) the Cobb County fleet serving as an example to others both in the public and private sectors.

- 1. The County Manager shall appoint a task force that will meet as appropriate, be knowledgeable of current fleet operations; become knowledgeable of new technologies and fuels; give consideration of potential application of alternative technology or fuels for the county's fleet; and, to offer recommendations for improvements. The Purchasing Director and Fleet Manager shall be Green Fleet Task Force members.
- 2. The following are several of the primary issues that, addressed comprehensively, will result in a Green fleet:
  - a. Vehicle Purchases the goal of purchasing low emitting fuel efficient vehicles and equipment for both vehicle replacement and additions to the fleet where practicable and reasonably cost competitive.
  - b. Optimum Fleet Size only vehicles that have a recognized need and demonstrated use shall be maintained. There will be periodic reviews with

recommendation to the County Manager. Unnecessary vehicles only contribute to liability, fuel consumption, maintenance costs and emissions.

- c. Vehicle Specifications prior to the purchase of any new vehicle or equipment, the user department shall develop specifications with the Fleet Manager to ensure appropriateness for its mission. Life cycle costs, standardization, ease of use and emissions quality are several of the issues which need be addressed.
- d. Vehicle Maintenance there will be evaluation of the maintenance practices for all type equipment. This includes consideration of frequency, supplies, fluids and tires. This has important impact on the equipment's efficiency, mile per gallon, costs of fuel and reduced emissions.
- e. Vehicle Technology a primary goal of this policy is to change fleet equipment from high pollution, low-mileage petroleum based fuel equipment to clean, more efficient, higher mileage and alternative fuel use equipment. Currently technology is transitioning to hybrid, full electric and hydrogen equipment. Research will refine these and offer others in the future.

The Green Fleet Task Force will continually evaluate the merits of alternative technologies and fuels to identify appropriate adoption by the County. Consideration will also be given to opportunities to retrofit existing equipment to improve efficiency and emissions.

f. Fuel – a primary goal is to use a highly efficient, clean readily available fuel(s) to operate all type equipment in the fleet. There is merit in use of several alternative fuels to avoid reliance on one source and possible supply disruption.

Among fuel or energy sources to be considered for the fleet are biodiesel, E-85, CNG (compressed natural gas), propane, hybrid, electric and several combinations. The intent is to phase out or "retire" conventional, fossil-fuel vehicles.

- g. Fuel Sources To secure reliable and cost contained fuel sources.
- 3. Cobb County is committed to accomplish, through the implementation of this policy, the transition of the current fossil fueled fleet to an environmentally, efficient "green" fleet which will make it more self-sufficient, reduce or contain fleet costs and be environmentally best for our community.